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09/707,428	11/07/2000	Steve King	CROSS-1360-1	9715

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EXAMINER

JACOBS, LASHONDA T

ART UNIT PAPER NUMBER

2157

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/707,428

Applicant(s)

KING ET AL.

Examiner

LaShonda T. Jacobs

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-16, 19-23, 28-30, 34, 37 and 38 is/are rejected.
- 7) ☒ Claim(s) 9, 17, 18, 24-27, 31-33, 35 and 36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

This Office Action is in response to Applicants' amendment filed on March 2, 2004. Claims 1-29 are presented for further examination. Claims 30-38 newly added by Applicants' are also presented for examination.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 4, 7-8, 10-13, 15-16, 19-23, 28-30, 34 and 37-38 are rejected under 35

U.S.C. 102(e) as being anticipated by Latif et al (hereinafter, "Latif", 6,400,730).

As per claim 1, Latif discloses a system for routing data across heterogeneous networks comprising:

- a first network having a first protocol (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- a storage area network having a second protocol, wherein the second protocol is incompatible with the first protocol (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- a first device connected to the first network (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);

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- a second device connected to the storage area network (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57); and
- a switch coupled between the first network and the second network (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- wherein requests from the first device to the second device are formatted according to the first protocol and transmitted to the switch (abstract, col. 3, lines 17-67 and col. 4, lines 1-25); and
- wherein the switch is configured to detect the requests and to reformat the requests according to the second protocol and transmit the requests to the second device (abstract, col. 5, lines 57-67, col. 6, lines 1-14, lines 44-57 and col. 7, lines 27-46).

As per claim 2, Latif discloses:

- wherein the first network is an out-of-band network and the second network is an in band network (abstract, col. 5, lines 57-67, col. 6, lines 1-14).

As per claim 4, Latif discloses:

- wherein the system further comprises a default gateway coupled to the first network (col. 5, lines 57-67, col. 6, lines 1-14).

As per claim 7, Latif discloses:

- wherein the request includes an IP address corresponding to the switch and information identifying the second device and the subject of the request (abstract and col. 11, lines 1-26).

As per claim 8, Latif discloses:

- wherein the switch is configured to receive the requests and to identify the requests as being directed to the second device (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57).

As per claim 10, Latif discloses a method for routing data across heterogeneous networks comprising:

- formulating a first request for data in a first device (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- transmitting the first request to a switching device via a first network, wherein the first request is transmitted according to a first protocol (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- formulating in the switching device a second request corresponding to the first request (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- transmitting the second request to a second device via a second network, wherein the second request is transmitted according to a second protocol and wherein the second protocol is incompatible with the first protocol (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- formulating a first response in the second device, wherein the first response is responsive to the second request (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- transmitting the first response to the switching device via the second network, wherein the first response is transmitted according to the second protocol (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);

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- formulating in the switching device a second response corresponding to the first response (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57); and
- transmitting the second response to the first device, wherein the response is transmitted according to the first protocol (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57).

As per claim 11, Latif discloses:

- wherein the switching device comprises a server coupled to the first network and a client coupled to the second network, wherein transmitting the first request to the switching device comprises transmitting the first request to the server and wherein formulating the second request comprises the client formulating the second request (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57).

As per claim 12, Latif discloses:

- wherein the first request and the second request ask for the same data (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57).

As per claim 13, Latif discloses:

- wherein the first response and the second response provide the same data (abstract, col. 3, lines 17-67 and col. 4, lines 1-25).

As per claim 15, Latif discloses:

- wherein transmitting the first request to a switching device comprises transmitting the first request to a device other than a default gateway (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57).

As per claim 16, Latif discloses:

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- wherein transmitting the first request to a switching device comprises transmitting the first request to a device other than a proxy server (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57).

As per claim 19, Latif further discloses:

- switching device identifying the first request as being directed to a device connected to the second network (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57).

As per claim 20, Latif further discloses:

- switching device formatting the subject of the first request in the second request and forwarding the second request to the second device (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57).

As per claim 21, Latif further discloses:

- switching device identifying a keyword in the first request, wherein the keyword indicates the format of the information contained in the first request (abstract, col. 5, lines 57-67, col. 6, lines 1-14, lines 44-57 and col. 11, lines 41-52).

As per claim 22, Latif further discloses:

- parsing the information contained in the first request according to the format identified by the keyword (abstract, col. 5, lines 57-67, col. 6, lines 1-14, lines 44-57 and col. 11, lines 41-52).

As per claim 23, Latif discloses a network interface for enabling communications between a first network having a first protocol and a second network having a second protocol comprising:

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- a server configured to receive a first request from a device on the first network, wherein the first request contains an indicator that the first request is directed to a device on the second network (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57); a client coupled to the server and configured to receive information from the server indicating the device on the second network and the information requested from the device on the second network (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- wherein the client is further configured to generate a second request and to transmit the second request to the device on the second network (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57) ;
- wherein the client is further configured to receive the requested information from the device on the second network and to convey the requested information to the server (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57); and
- wherein the server is configured to transmit the requested information to the device on the first network (abstract, col. 3, lines 17-67 and col. 4, lines 1-25).

As per claim 28, Latif discloses

- wherein the client is configured to generate requests which are formatted according to a physical layer protocol that is different than the physical layer protocol according to which the first request is transmitted to the server (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57).

As per claim 29, Latif discloses:

- wherein the network interface comprises a switch containing the server and the client (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57).

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As per claim 30, Latif discloses a method for routing data across heterogeneous networks comprising:

- formulating a first request for data in a first device (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- transmitting the request to a switching device via a first network, wherein the first request is transmitted according to the first protocol (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- identifying a keyword in the first request, wherein the keyword indicates the format of information in the first request (abstract, col. 5, lines 57-67, col. 6, lines 1-14, lines 44-57 and col. 11, lines 41-52);
- parsing the first request based on the keyword (abstract, col. 5, lines 57-67, col. 6, lines 1-14, lines 44-57 and col. 11, lines 41-52);
- formulating in the switching device a second request corresponding based on the format indicated by the key word (abstract, col. 5, lines 57-67, col. 6, lines 1-14, lines 44-57 and col. 11, lines 41-52);
- transmitting the second request to a second device via a second network, wherein the second request is transmitted according to a second protocol and wherein the second protocol is incompatible with the first protocol (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- formulating a first response in the second device, wherein the first response is responsive to the second request (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);

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- transmitting the first response to the switching device via the second network, wherein the first response is transmitted according to the second protocol (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- formulating in the switching device a second response corresponding to the first response (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57); and
- transmitting the second response to the first device, wherein the response is transmitted according to the first protocol (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57).

As per claim 34, Latif discloses a system for routing data across heterogeneous networks comprising:

- a first network operating according to a first protocol (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- a first device coupled to the first network (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- a second network operating according to a second protocol (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- a second device coupled to the second network (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- a switch coupled to the first and second network (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);

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- wherein the first device is configured to generate a first request containing a keyword indicating an arrangement of information in the first request (abstract, col. 5, lines 57-67, col. 6, lines 1-14, lines 44-57 and col. 11, lines 41-52); and

wherein the switch is configured to:

- receive the first request (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- parse the first request based on the keyword (abstract, col. 5, lines 57-67, col. 6, lines 1-14, lines 44-57 and col. 11, lines 41-52);
- generate a second request based on information in the first request (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- send the second request to the second device according to the second protocol (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- receive a first response from the second device (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57);
- generate a second response based on the first response; and transmit the second response to the first device according to the first protocol (abstract, col. 5, lines 57-67, col. 6, lines 1-14 and lines 44-57).

As per claim 37, Latif discloses:

- wherein the second protocol comprises a fiber channel protocol (col. 5, lines 57-67 and col. 6, lines 1-14).

As per claim 38, Latif discloses:

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- wherein the second network comprises a storage area network (col. 5, lines 57-67 and col. 6, lines 1-14).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Latif in view of Sridhar et al (hereinafter, "Sridhar", 6,266,701).

As per claim 6, Latif discloses the invention substantially as claimed.

However, Latif does not explicitly disclose:

- wherein the system further comprises a firewall which is separate from the switch.

Sridhar discloses a communication system for improving communication over a data network between an application and remote systems including:

- wherein the system further comprises a firewall which is separate from the switch (col. 1, lines 54-64).

Given the teaching of Sridhar, it would have been obvious to one of ordinary skill in the art to modify Latif by including a firewall between the networks in order examine each message entering or leaving the network and blocking those that do not meet security criteria preventing any unauthorized user from accessing private networks.

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5. Claims 3, 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Latif in view of Skopp et al (hereinafter, "Skopp", 6,256,739).

As per claim 3, Latif discloses the invention substantially as claimed.

However, Latif does not explicitly disclose:

- wherein the switch comprises an HTTP server coupled to an HTTP client, wherein the HTTP server is configured to receive the requests formatted according to the first protocol from the first device and wherein the HTTP, client is configured to forward corresponding requests formatted according to the second protocol to the second device.

Skopp discloses a method and apparatus to determine user identify and limit access to a communications network including:

- wherein the switch comprises an HTTP server coupled to an HTTP client, wherein the HTTP server is configured to receive the requests formatted according to the first protocol from the first device and wherein the HTTP, client is configured to forward corresponding requests formatted according to the second protocol to the second device (abstract, col. 3, lines 52-67 and col. 6, lines 50-54).

Given the teaching of Skopp, it would have been obvious tone of ordinary skill in the art to modify, Latif to incorporate a web server for storing web pages in order to allow a user to retrieve web pages in a timely and efficient manner.

As per claim 5, Latif discloses the invention substantially as claimed.

However, Latif does not explicitly disclose:

- wherein the system further comprises a proxy server coupled to the first network.

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Skopp discloses a method and apparatus to determine user identify and limit access to a communications network including:

- wherein the system further comprises a proxy server coupled to the first network (col. 4, lines 56-67).

Given the teaching of Skopp, it would have been obvious tone of ordinary skill in the art to modify, Latif to incorporate a proxy server for locally storing web pages in order to allow a user to retrieve web pages in a timely and efficient manner and reduce network traffic.

As per claim 14, Latif discloses the invention substantially as claimed.

However, Latif does not explicitly disclose:

- wherein formulating the requests comprises formulating HTTP requests.

Skopp discloses a method and apparatus to determine user identify and limit access to a communications network including:

- wherein formulating the requests comprises formulating HTTP requests (col. 4, lines 56-67).

Given the teaching of Skopp, it would have been obvious tone of ordinary skill in the art to modify, Latif by specifying that the request is a HTTP request in order to allow a user to retrieve web pages in a timely and efficient manner.

Allowable Subject Matter

6. Claims 9, 17, 18, 24-27, 31-33 and 35-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,219,790 to Lloyd et al

U.S. Pat. No. 65,987,504 to Toga et al

U.S. Pat. No. 5,535,375 to Eshel et al

U.S. Pat. No. 6,044,407 to Jones et al

U.S. Pat. No. 5,812,768 to Page et al

U.S. Pat. No. 6,654,794 to French

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaShonda T. Jacobs whose telephone number is 703-305-7494.

The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 703-308-7562. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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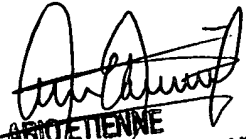
LaShonda T. Jacobs

Examiner

Art Unit 2157

ltj

April 16, 2004


~~ARIO ETIENNE~~
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100